

# Liveable Neighbourhoods Zone 04 - Gay Street

Stage 3 Road Safety Audit

Bath and North East Somerset Council

Project number: 60668625

April 2025

### Quality information

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### Revision History

<b>Revision</b>	<b>Revision date</b>	<b>Details</b>	<b>Authorised</b>	<b>Name</b>	<b>Position</b>
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# 1. Introduction

## 1.1 Project Details

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<b>Report Title:</b>	Liveable Neighbourhoods Zone 04 Gay Street – Stage 3 Road Safety Audit – Designers’ Response
<b>Date:</b>	10 <sup>th</sup> December 2024
<b>Document Reference &amp; Rev:</b>	60668625-ACM-LN04CP-BNESC-RP-RSA3-0001_P01_Designers Response
<b>Prepared by:</b>	██████████, AECOM
<b>On behalf of:</b>	Bath and North East Somerset Council

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1.1.1 This report documents the Designer’s Response from the results of a Stage 3 Road Safety Audit carried out on the Experimental Traffic Regulation Order (ETRO) around Gay Street, Bath. The Audit was carried out at the request of ██████████, AECOM Bristol, on behalf of Bath and North East Somerset (B&NES) Council, the Overseeing Organisation.

1.1.2 The Road Safety Audit Team membership, was as follows:

Name: ██████████  
Qualifications: BSc (Hons) DipASM MCIHT MSoRSA  
Role: Team Leader  
Organisation: AECOM, Chesterfield

Name: ██████████  
Qualifications: BEng (Hons), EngTech MICE  
Role: Team Member  
Organisation: AECOM, Birmingham

1.1.3 The Audit Team has had no contact with the Design Team, nor had any involvement in the design process of the proposed scheme.

1.1.4 The Audit comprised of a review of the supplied drawings and documents listed in **Appendix A**, which were examined by the Audit Team during week commencing 18<sup>th</sup> November 2024. A site visit was undertaken during daylight hours on Thursday 21<sup>st</sup> November 2024 between the hours of 12:30 and 13:30. Weather conditions during the site visit were dry and sunny, with a dry road surface.

1.1.5 Observed traffic and pedestrian flows were high during the site visit and were considered typical for the time of visit, and nature of the site and surrounding area.

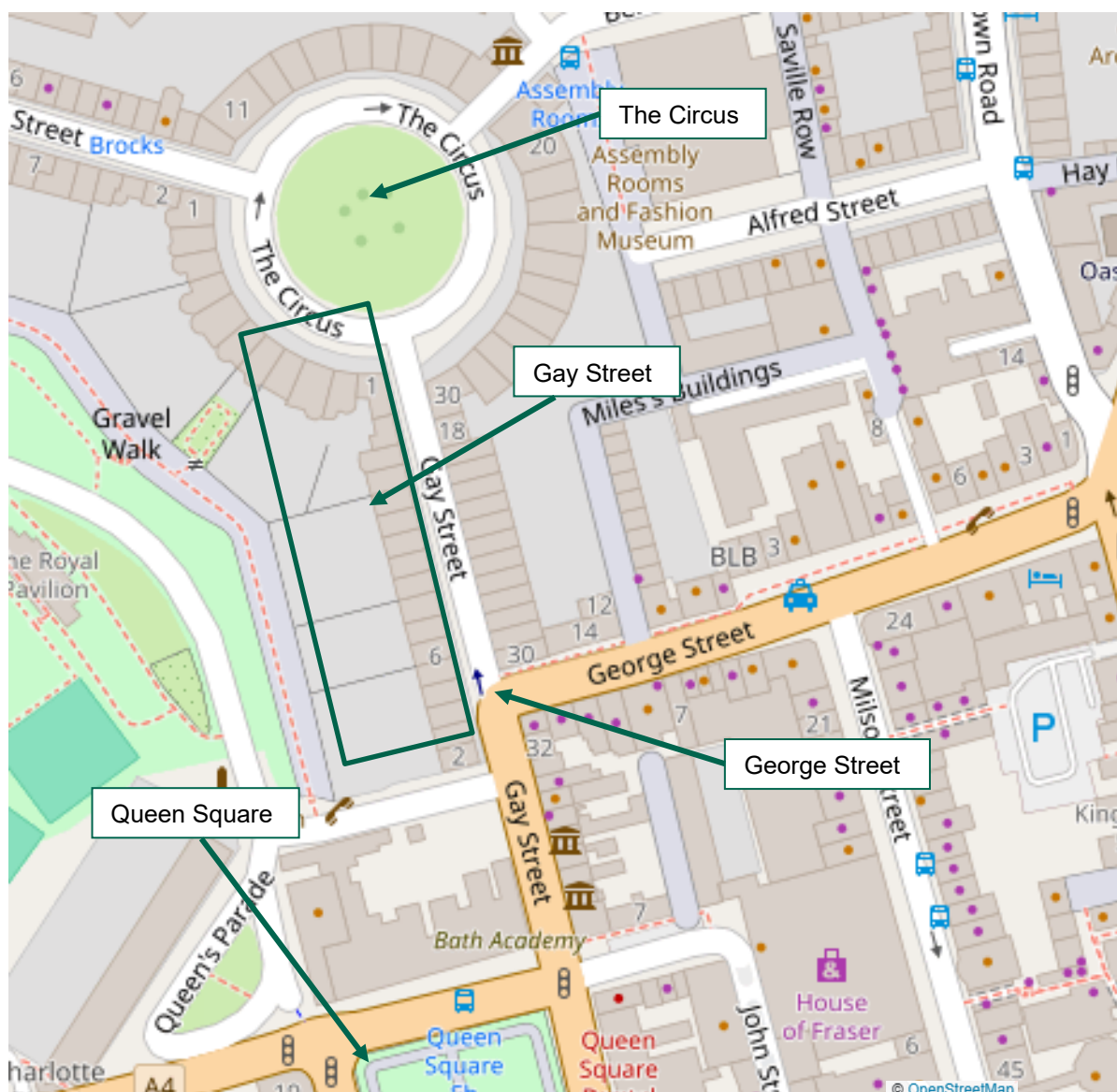
1.1.6 A site visit during the hours of darkness was undertaken on the same day by both members of the Audit Team, between the hours of 16:45 and 17:15. The weather conditions during the site visits were clear, with a dry road surface.

1.1.7 Both Avon and Somerset Police and a representative from Bath and North East Somerset Council (maintaining Authority) were invited to the daytime site visit. However, Avon and Somerset Police were unavailable and therefore did not attend the site visit. A Senior Engineer from B&NES was in attendance for the daytime site visit only.

## 1.2 Site Description

- 1.2.1 The Lower Lansdown schemes are located to the north of Bath City Centre. Gay Street has on-street parking on its eastern side. The area lies within the central resident's parking zone. The parking restrictions are active seven days a week between the hours of 8am and 6pm. The parking restrictions on Gay Street allow for pay and display parking of up to 3 hours.
- 1.2.2 Gay Street runs north to south between Queens Square and The Circus. George Street meets Gay Street at a priority-controlled junction. The movement between Southern Gay Street and George Street has priority over the ahead movements on Gay Street. There are three notable landmarks popular with tourists in the immediate locality of the scheme. These are Queen's Square to the south, and The Circus and The Royal Crescent to the north.
- 1.2.3 A map of the general area in which the scheme is located is shown in Figure 1.

Figure 2: Location Plan



1.2.4

## 1.3 Works Summary

- 1.3.1 The works presented for this Stage 3 Road Safety Audit are as follows:
- A modal filter at the Gay Street / George Street junction to prevent motorised vehicles from travelling northbound to The Circus via Gay Street and retains the right turn ban from George Street to Gay Street. The traffic island narrows the crossing point and also provides an informal crossing point with drop kerbs and tactile paving.

## 1.4 Special Considerations

- 1.4.1 No special considerations have been raised by the Design Team as part of this Stage 3 Road Safety Audit.

## 1.5 Collision Analysis

- 1.5.1 Personal Injury Collision (PIC) data was not provided to AECOM by Bath and North East Somerset Council; therefore, collisions have been analysed on CrashMap. Within the past five years there have been a total of seven slight collisions and one fatal collision within the scheme extents. The fatal collision took place on 16/12/2020, a single vehicle was involved; the sole casualty was not a cyclist, pedestrian or other vulnerable person.

## 1.6 Traffic Flow and Speed Data

- 1.6.1 Traffic flows and speed data have been provided as part of this Stage 3 Road Safety Audit, as shown in **Table 1**. The signed speed limit is 20mph throughout the scheme extents.

**Table 1: ADT and Average Speed (Gay Street)**

<i>Location</i>	<i>Year</i>	<i>ADT</i>	<i>Av Speed (mph)</i>	<i>Speed 85% (mph)</i>
<b><i>Gay Street (north)</i></b>	2019	4063	16.2	19.8
<b><i>Gay Street (south)</i></b>	2019	16710	13.5	18.6
<b><i>Gay Street (south)</i></b>	2022	12233	15.8	19.2
<b><i>Gay Street (south)</i></b>	2023	14099	14.7	18.6
<b><i>Queens Parade Place</i></b>	2019	1078	13.9	18.3
<b><i>Queens Parade Place</i></b>	2021	523	14.9	18.6
<b><i>Queens Parade Place</i></b>	2022	1071	14.5	18.0
<b><i>Queens Parade Place</i></b>	2023	1131	14.3	18.0

## 1.7 Terms of Reference

- 1.7.1 The Terms of Reference of this Audit are as described in DMRB GG 119: Road Safety Audit. The advice issued in the DMRB applies to trunk road and motorway improvement schemes; however, it has been used in this report to define the scope of this Audit.
- 1.7.2 The Audit Team has examined and reported only on the road safety implications of the scheme as presented and how it impacts on all road users and has not examined or verified the compliance of the designs to any other criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard without touching on technical audit.
- 1.7.3 An absence of comment relating to specific road users / modes in **Section 3** of this report does not imply that they have not been considered, instead the Audit Team feel they are not adversely affected by the proposed changes.
- 1.7.4 This Road Safety Audit is not intended to identify pre-existing hazards which remain unchanged due to the proposals; hence they will not be raised in **Section 3** of this report as they fall outside the remit of Road Safety Audit in general as specified in the procedure GG 119. Any safety issues identified during the Audit and site visit that are outside the Terms of

Reference, but which the Audit Team wishes to draw to the attention of the Client Organisation, will be set out in separate correspondence.

- 1.7.5 Nothing in this Audit should be regarded as a direct instruction to include or remove a measure from within the scheme. Responsibility for designing the scheme lies with the Designer and as such the Audit Team accepts no design responsibility for any changes made to the scheme as a result of this Audit.
- 1.7.6 In accordance with GG119, this Audit has a maximum shelf life of five years. If the scheme does not progress to the next stage in its development within this period, then the scheme should be re-audited.
- 1.7.7 Unless general to the scheme, all comments and recommendations will be referenced to the drawings supplied in the audit brief, and the locations of problems will be indicated on the plans in **Appendix B** where appropriate.

## 2. Items Raised at Previous Road Safety Audits

- 2.1.1 A Stage 1/2 Road Safety Audit was undertaken by AECOM in December 2023, reference number "60668625\_LNZ04\_Lower Lansdown - Stage 1\_2 RSA". A Designer's Response has been provided for the previous Stage 1/2 Road Safety Audit.
- 2.1.2 Issues relating to the scheme which were raised during the Stage 1/2 Road Safety Audit appear to have been resolved or are no longer felt to be road safety issues.

## 3. Items Raised at this Stage 3 Road Safety Audit

**3.1.1** The following problems have been identified as potential road safety issues following a review of the documents submitted as part of this scheme and observations made during the site inspection.

### A. ALIGNMENT

#### A1. VISIBILITY

No issues considered to be detrimental to the safety of road users were identified in relation to this subject.

#### A2. LAYOUT

Please refer to **Problem C1.1**.

## **B. GENERAL**

### **B1. DEPARTURES FROM STANDARD**

No Departures from Standard have been provided to the Audit Team as part of this Stage 3 Road Safety Audit.

### **B2. LANDSCAPING**

No issues considered to be detrimental to the safety of road users were identified in relation to this subject.

### **B3. ACCESS**

No issues considered to be detrimental to the safety of road users were identified in relation to this subject.

### **B4. EMERGENCY VEHICLES**

No issues considered to be detrimental to the safety of road users were identified in relation to this subject.

### **B5. LAY-BYS**

Not applicable.

### **B6. DRAINAGE**

No issues considered to be detrimental to the safety of road users were identified in relation to this subject.

## C. JUNCTIONS

### C1. T, X, Y – JUNCTIONS

<b>Problem: C1.1</b>	
<b>Drawing Number(s):</b>	60668625-ACM-04-DD-LL_ETRO-SHT-0102.
<b>Location:</b>	Gay Street / George Street junction.
<b>Summary:</b>	Observed banned movements during the site visit may result in a side swipe collision.
<b>Description:</b>	
<p>The scheme has introduced a no entry northbound from Gay Street into Gay Street (which was not prohibited previously) and has also introduced a mandatory left turn for southbound traffic down Gay Street into George Street.</p> <p>However, during the site visit, the Audit Team observed multiple vehicles carrying straight on into Gay Street (southbound) towards Queens Square. Due to the busy nature of George Street, vehicles egressing from Gay Street were observed to edge out of the junction and sit in the middle of the carriageway, waiting for a gap in southbound traffic. If this continues, this may result in a side swipe collision.</p>	
<b>Recommendation:</b>	
It is recommended that the junction is monitored and drivers undertaking banned movements are educated.	
Road Safety Audit Stage 3 Designers Response:	
Monitoring of the junction will be undertaken as part of the ETRO process. Discussions are being undertaken by the Highway Authority around the use of education and camera enforcement for heading south bound on Gay Street and turning east into George Street.	
Road Safety Audit Stage 3 overseeing Organisation Response:	
Agree with recommendation and Designers Response.	

### C2. ALL ROUNDABOUTS

Not applicable.

### C3. MINI ROUNDABOUTS



Not applicable.

## **C4. TRAFFIC SIGNALS**

Not applicable.

## D. WALKING, CYCLING AND HORSE RIDING

### D1. PEDESTRIANS

<b>Problem: D1.1</b>	
<b>Drawing Number(s):</b>	60668625-ACM-04-DD-LL_ETRO-SHT-0102.
<b>Location:</b>	Tactile paving across Gay Street.
<b>Summary:</b>	Poor installation of tactile paving may result in a trip and fall, causing personal injury.
<b>Description:</b>	
	
<p>The scheme has installed new tactile paving across Gay Street and the modal filter; however, the tactile paving is uneven and has sunk in some places. This uneven and sunken surface creates an upstand in the tactile paving which a pedestrian may trip on and fall, resulting in personal injury.</p> <p>In addition, there are gaps within the tactile paving at the edge of the carriageway. Visually impaired users may reach this gap, and inadvertently continue into the carriageway, increasing their risk of being struck by an oncoming vehicle.</p>	
<b>Recommendation:</b>	
It is recommended that the tactile paving is re-laid flush to the footway without upstand on the kerb and the gap within the paving layout is covered.	
Road Safety Audit Stage 3 Designers Response:	
The tactile paving should be made good by the contractor, ensuring the surface is not uneven and does not present a trip hazard to any users.	
Where the tactile paving is obstructed by a utility cover, temporary tactile paving secured with adhesive, in a matching colour, should be used to fill in the gap.	
Road Safety Audit Stage 3 Overseeing Organisation Response:	
Agree that tactile paving should be made good and if practical, added in the gap between the utility cover and paving.	

### D2. CYCLISTS

No issues considered to be detrimental to the safety of road users were identified in relation to this subject.

### **D3. EQUESTRIANS**

Not applicable.

## E. TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING

### E1. SIGNS

<b>Problem: E1.1</b>	
<b>Drawing Number(s):</b>	60668625-ACM-04-DD-LL_ETRO-SHT-0102.
<b>Location:</b>	Gay Street (adjacent to Queens Parade Place).
<b>Summary:</b>	20mph speed limit sign obstructed by signage may result in vehicles exceeding the posted speed limit, resulting in loss of control collisions.

**Description:**



The scheme has installed new signage on an existing post on the northbound carriageway of Gay Street. However, this signage obstructs an existing 20mph speed limit sign. Drivers may fail to observe the posted speed limit of 20mph, and travel at a higher speed, resulting in a loss of control collision.

**Recommendation:**

It is recommended that the 20mph speed limit sign is relocated into full visibility to drivers of approaching vehicles.

**Road Safety Audit Stage 3 Designers Response:**

The signage referred to in the picture was not installed by the scheme and is existing signage that should have been removed in accordance with the 'For Construction' drawing.

When the signage is removed, as per the design, the 20mph sign should be visible to drivers.

**Road Safety Audit Stage 3 Overseeing Organisation Response:**

Agree with recommendation and Designers response.



<b>Problem: E1.2</b>	
<b>Drawing Number(s):</b>	60668625-ACM-04-DD-LL_ETRO-SHT-0102.
<b>Location:</b>	Gay Street (adjacent to Queens Parade Place).
<b>Summary:</b>	Information on signage may confuse motorists, resulting in unsuitable manoeuvres and cause rear end shunt or graze type collisions.
<b>Description:</b>	
	
<p>The scheme prevents northbound vehicular access to Gay Street with the installation of a modal filter and “no entry” signs. However, an existing sign stating “except authorised buses” may cause confusion for motorists and/or bus drivers, as they may believe buses are able to travel northbound along Gay Street which is not possible due to the new alignment of the modal filter. This may result in unsuitable and sudden manoeuvres, causing graze type or rear end shunt collisions.</p>	
<b>Recommendation:</b>	
It is recommended the bus signage is removed.	
<b>Road Safety Audit Stage 3 Designers Response:</b>	
<p>The ‘For Construction’ drawings issued to the contractor showed the ‘Except authorised buses’ signage and supplementary plate to be removed and stored off site.</p> <p>This should be resolved as snagging by the contractor.</p>	
<b>Road Safety Audit Stage 3 Overseeing Organisation Response:</b>	
Agree with recommendation and Designers response.	

## **E2. CARRIAGEWAY MARKINGS**

No issues considered to be detrimental to the safety of road users were identified in relation to this subject.

## **E3. POLES / COLUMNS**

Please refer to Problem E1.1 and E1.2.

## **E4. LIGHTING**

No issues considered to be detrimental to the safety of road users were identified in relation to this subject.

## 4. Design Organisation and Overseeing Organisation Comments

4.1 On behalf of the Design Organisation, I certify that:

The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.

Name: [REDACTED]

Signed: [REDACTED]

Position: Design Lead

Organisation: AECOM

Date: 23/04/2025

4.2 On behalf of the Overseeing Organisation, I certify that:

The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Design Organisation, and the agreed RSA actions should be progressed by the Overseeing Organisation.

Name: Paul Garrod

Signed: 

Position: Team Manager- Traffic Safety and Network

Organisation: Bath & North East Somerset Council

Date: 3 April 2025

Name: Steve Froggatt

Signed: 

Position: Team Manager- Design and Projects

Organisation: Bath & North East Somerset Council

Date: 1 April 2025

Name: Cathryn Brown

Signed: 

Position: Senior Project Manager

Organisation: Bath & North East Somerset Council

Date: 3 April 2025

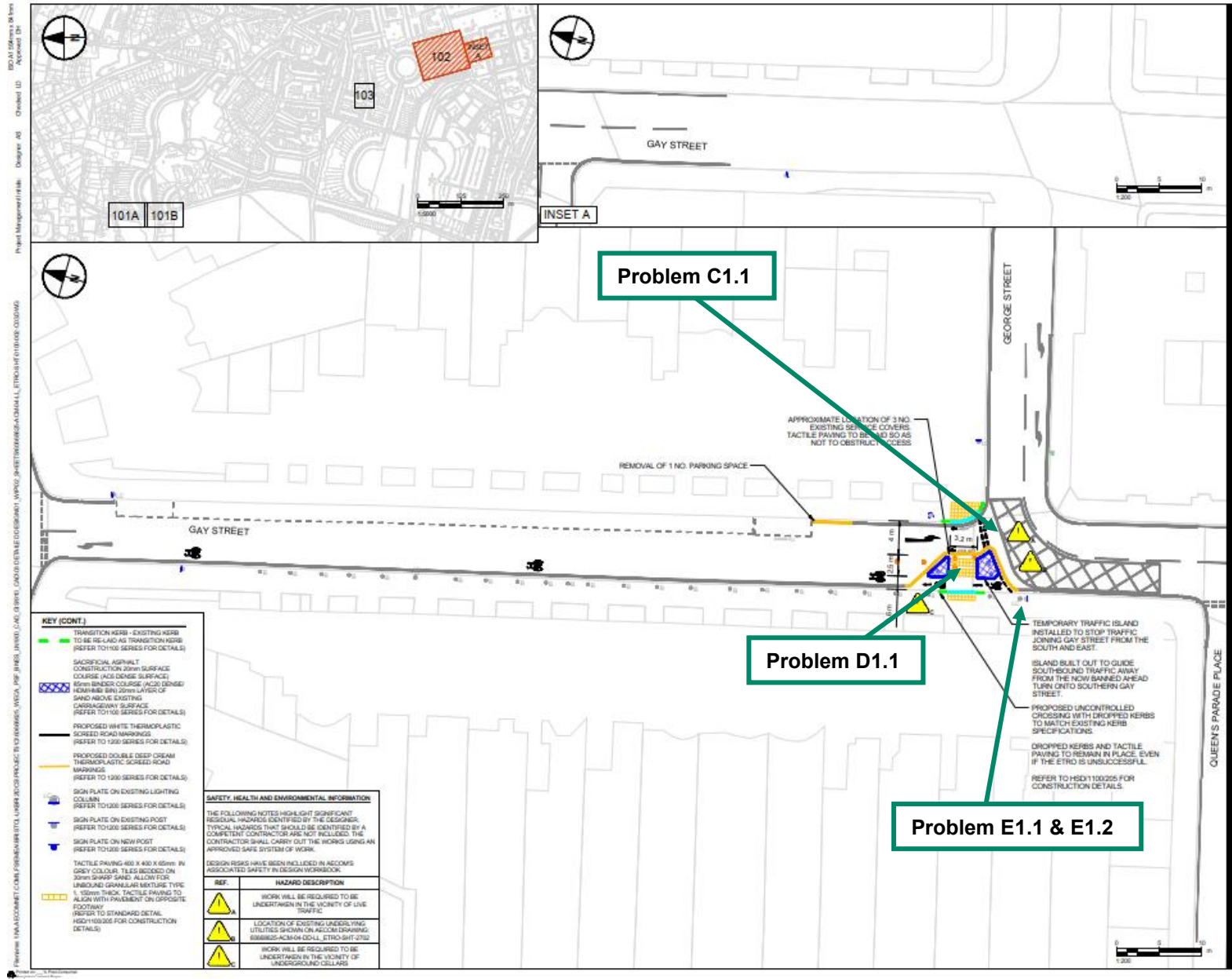
4.1.1



## Appendix A – Documents Provided for Audit

Document Number	Rev	Description
Liveable Neighbourhoods Zone 04 - Lower Lansdown RSA 3 Brief_PG_SJF	-	Stage 3 Road Safety Audit Brief
60668625-ACM-04-LL-SHT-0102	C05	GENERAL ARRANGEMENT – GAY STREET
60668625-ACM-04-LL-SHT-0112	C04	VEHICLE SWEPT PATHS – GAY STREET
60668625-ACM-04-LL-SHT-0202	C05	SITE CLEARANCE – GAY STREET
60668625-ACM-04-LL-SHT-1102	C04	KERBS AND PAVED AREAS – GAY STREET
60668625-ACM-04-LL-SHT-1202	C04	SIGN PLAN – GAY STREET
60668625-ACM-04-LL-SHT-1212	C05	SIGNAGE SCHEDULE – GAY STREET
60668625-ACM-04-LL-SHT-2702	C04	EXISTING UTILITIES PLAN – GAY STREET

# Appendix B – Location of Problems Plan



**AECOM**

**PROJECT**  
B&NES  
LIVEABLE  
NEIGHBOURHOODS

**CLIENT**  
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**GENERAL NOTES**

- Do not scale from this drawing. All dimensions and levels are in metres, unless otherwise stated.
- This drawing is for guidance only, the contractor shall be responsible for establishing the position and status of all statutory utility apparatus prior to commencing any works. The contractor shall coordinate and undertake all works in conjunction and agreement with the affected statutory utility companies as necessary. Contractor to refer to NRSWA information supplied.
- All new road markings are laid and signs erected in accordance with Traffic Signs Manual, Chapter 5 (2016). The Traffic Signs Regulations and General Directions 2016 (TSRGD 2016).
- Topographical survey information has not been obtained for this scheme, OS references and mapping have been used.
- Crown copyright all rights reserved. 2023 OS information provided by Bath and North East Somerset Council.

**KEY**

**EXISTING FEATURES TO REMAIN**

- UTILITY COVER (APPROX. LOCATION)
- BOLLARD
- THERMOPLASTIC ROAD MARKINGS

**EXISTING FEATURES TO RELOCATE**

- SIGN PLATE

**PROPOSED FEATURES**

- PROVIDE ANEULAY KERBS (S-SHAPED KERBS - HALF BATTERED PROFILE (REFER TO H100 SERIES FOR DETAILS))
- DROPPED KERBS - EXISTING KERBS TO BE RE-LAID AS DROPPED KERBS (REFER TO H100 SERIES FOR DETAILS)

**FOR CONSTRUCTION**

**ISSUE/REVISION**

NO	DATE	DESCRIPTION
01	21/06/2024	REMOVED TEMP TACTILES
02	14/06/2024	REVISED ROAD MARKING
03	20/03/2024	ISSUE FOR CONSTRUCTION
04		

**PROJECT NUMBER**  
60668625

**SHEET TITLE**  
LIVEABLE NEIGHBOURHOODS  
ETRO GENERAL ARRANGEMENT  
LOWER LANSDOWN GAY ST

**SHEET NUMBER**  
60668625-ACM-04-LL\_ETRO-SHT-0102

